

REMARKS

Claims 1 through 20 remain pending in this application. In response to the non-final Office Action dated June 17, 2005, claims 3, 6, 7, 12, 13 and 16 have been amended. Care has been taken to avoid the introduction of new matter. Favorable reconsideration of the application is respectfully solicited.

Claims 1, 2, 10, 11 and 20 currently stand rejected. Claims 3 through 9 and 12 through 19 stand under objection solely for their dependency from a rejected parent claim. In response, claims 3, 12, 13 and 16 have been rewritten in independent form to include all limitations of their former parent claims. All claims under objection now do not depend from rejected parent claims. Withdrawal of the objection and allowance of claims 3 through 9 and 12 through 19 are therefore respectfully solicited. Claims 6 and 7 have been amended to correct spelling errors.

Claims 1, 2, 10 and 11 have been rejected separately on two grounds. In paragraph 2 of the Office Action, these claims have been rejected under 35 U. S. C. § 103(a) as being unpatentable over U.S. patent 5,461,316 (Maruyama) in view of U.S. patent 5,444,376 (Dittman), and further in view of U.S. patent 4,833,400 (Boutigny).

Legal precedent is well developed with respect to 35 U.S.C. §103. As stated in *Graham v. John Deere Co.* 383 U.S. 1, 13, 148 USPQ 459, 465 (1966), obviousness under 35 U.S.C. §103 must be determined by considering (1) the scope and content of the prior art; (2) ascertaining the differences between the prior art and the claims in issue; and (3) resolving the level of ordinary skill in the pertinent art. The PTO is thus charged with the initial burden of identifying a source in the applied prior art for: (1) claim features; and (2) the realistic requisite motivation for combining applied references to arrive at the claimed invention with a reasonable expectation of successfully achieving a specific benefit. *Smith Industries Medical Systems v. Vital Signs*, 183 F.3d 1347, 51 USPQ2d 1415 (Fed. Cir. 1999). This

burden is not met if there is no showing that the combination of references would actually meet all the limitations of the claims under consideration.

An Office Action rejection must provide a reason why one having ordinary skill in the art would have been led to modify the prior art or to combine prior art references to arrive at the claimed invention. *Ashland Oil, Inc. v. Delta Resins & Refractories, Inc.*, 776 F.2d 281, 227 USPQ 657 (Fed. Cir. 1985); *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988); *Stratoflex, Inc. v. Aeroquip Corp.*, 713 F.2d 1530, 218 USPQ 871 (Fed. Cir. 1983); *In re Warner*, 379 F.2d 1011, 154 USPQ 173 (CCPA 1967).

What may or may not be known in general does not establish the requisite realistic motivation to support the ultimate legal conclusion of obviousness under 35 U.S.C. §103. *In re Deuel*, 51 F.3d 1552, 34 USPQ2d 1210 (Fed. Cir. 1995). The requisite motivation is not an abstract concept, but must stem from the applied prior art as a whole and have realistically impelled one having ordinary skill in the art, at the time the invention was made, to modify a reference in a specific manner to arrive at a specifically claimed invention with a reasonable expectation of achieving a specific benefit. *In re Newell*, 891 F.2d 899, 13 USPQ2d 1248 (Fed. Cir. 1989). It is submitted that the prior art does not meet these criteria for any of the claims under rejection. The question is not what one having ordinary skill in the art could or could not do, but: *why* would one having ordinary skill in the art have been realistically impelled to deviate from the express teachings of the prior art to arrive at the claimed invention? *Gentry Gallery v. Berkline*, 134 F.3d 1473, 45 USPQ2d 1498 (Fed. Cir. 1998); *In re Fritch*, 972 F.2d 1260, 23 USPQ2d 1780 (Fed. Cir. 1992). In the absence of such a prior art suggestion for modification, the basis of the rejection is no more than inappropriate hindsight reconstruction using appellant's claims as a guide. *In re Warner*, 379 F.2d 1011, 154 USPQ 173 (CCPA 1967).

Reconsideration of the rejection in light of these established tenets is respectfully solicited. Independent claim 1 recites, in part, the following:

a capacitive divider circuit portion . . . comprising at least one of a variable capacitor and a plurality of fixed capacitors; and

a switching element configured to enable at least one of adjustment of a variable capacitor and selection or de-selection of at least one of the plurality of fixed capacitors to provide one of a plurality of selected capacitance reactance ratios.

The primary applied reference, Maruyama, discloses none of these requirements, as recognized in the Office Action. Dittman has been relied upon for disclosing a circuit containing a variable capacitor and a plurality of fixed capacitors. Dittman does not disclose a switch for selection or de-selection of one or more capacitors in or from the circuit, as recognized in the Office Action. Boutigny has been relied upon for disclosing a circuit containing a plurality of fixed capacitors and a switch for selecting one of the capacitors in circuit connection. Boutigny does not disclose a variable capacitor nor a circuit combination of a variable capacitor and one or more fixed capacitors.

The Office Action states its position of why the invention of claim 1 would have been obvious from the three reference disclosures solely in the third paragraph at page 3, as follows:

At the time of the invention it would have been obvious for one of ordinary skill in the art to modify Maruyama et al. by adding variable capacitance disclosed by Dittmann et al. and incorporating the switching element disclosed by Boutigny so that the capacitors may be switched in and out for obtaining a multi-range attenuator for accurately measuring a signal.

There is no explanation in the Office Action of why the artisan would have been impelled to modify the Maruyama device, nor why the Dittman and Boutigny disclosures purportedly would have led to the invention claimed. The Office Action does not set forth the proposed modified implementation with any particularity. The Maruyama device

includes a distributor (23) utilizes a single capacitor (30) in the circuit that meets the stated detection objective. No adjustment is contemplated in the disclosure.

Dittman combines the detection outputs of a pair of ignition coils in circuit 32 that includes a variable capacitor (45). While this capacitor “may be simulated by parallel and/or series circuits consisting of several capacitors,” there is no teaching in the disclosure of a switching element. The Dittman “simulation” teaching would not have suggested a combination of at least one variable capacitor, which can be adjusted, and a plurality of fixed capacitors, as claimed. It is submitted that there is no evident reason why the artisan would have been led to such combination if, according to Dittman, a variable capacitor can be simulated by other capacitors. No explanation has been provided in the Office Action of why the artisan would have been inclined to modify the simple circuit of Maruyama, which has no identified disadvantages, by a consideration of Dittman, which discloses a relatively complex combination of a tuning arrangement (29) and circuit for receiving inputs from multiple ignition coils.

The Boutigny patent, relied upon for the teaching of Fig. 4, simply discloses use of a switch that is used for selection of one of three capacitive paths for connection between input and output terminals and for insertion of a resistance. Contrary to the Office Action, no teaching has been found of adjustment of a variable capacitor and selection or de-selection of at least one of a plurality of fixed capacitors.

Claim 2 contains the requirement *further comprising* a first shunt connected in parallel to an output of the capacitive divider circuit portion at one end and connected to ground at another end. It is submitted that element 45 cannot reasonably be made to correspond to both the claimed variable capacitance and the additional shunt, as applied in the Office Action.

Method claims 10 and 11 recite adjusting a capacitance value of at least one capacitor in a variable compensation circuit to provide one of a plurality of selected capacitance reactance ratios, the variable compensation circuit comprising circuit configurations similar to those of claims 1 and 2. These requirements are not disclosed or suggested by the combined teachings of the applied references.

In paragraph 3 of the Office Action, claims 1, 2, 10 and 11 have been rejected under 35 U. S. C. § 103(a) as being unpatentable over Dittmann alone. It is submitted that Dittman lacks teaching or suggestion of all claimed elements. The Dittman variable capacitor “simulation” teaching would not have suggested a combination of at least one variable capacitor, which can be adjusted, and a plurality of fixed capacitors, as claimed. It is submitted that there is no evident reason why the artisan would have been led to such combination if, according to Dittman, a variable capacitor can be simulated by other capacitors.

The Office Action recognizes that Dittman does not disclose a switching element. While Dittmann does disclose that the illustrated variable capacitor 45 may be replaced by a combination of capacitors configured to provide a desired value of capacitance, there is no disclosure for providing a plurality of such circuits to be selected by means of a switch to be adjusted as desired. There is no disclosure that, or explanation given in the Office action as to why, the circuit replacing variable capacitor 45 should contain both an additional variable capacitor and a plurality of fixed capacitors. In summary, it is submitted that a person of ordinary skill in the art would not have found it obvious to replace the variable capacitor of Dittmann with a switching element configured to enable at least one of adjustment of a variable capacitor and selection or de-selection of at least one of the plurality of fixed capacitors to provide one of a plurality of selected capacitance reactance ratios, as required by claims 1, 2, 10 and 11.

Claim 20 has been rejected under 35 U. S. C. § 103(a) as being unpatentable over Dittman in view of U.S. patent 5,677,632 (Meeker). Claim 20 recites, *inter alia*, the following:

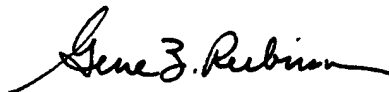
wherein the variable compensation circuit comprises a capacitive divider circuit portion including a plurality of capacitors and a switching element configured to enable at least one of a selection, de-selection, and adjustment of the plurality of capacitors, and wherein the adjusting step further comprises adjusting a return to zero portion of a displayed waveform output from the variable compensation circuit.

Meeker has been relied upon solely for disclosing “adjusting a return to zero portion of a displayed waveform . . . for performing calibration for a capacitive pickup circuit” Neither Dittman nor Meeker, nor their teachings in combination, suggest the switching element and adjustment of the plurality of capacitors as recited in claim 20.

In summary, it is submitted that all pending claims are patentably distinguishable from the prior art. Allowance of the application is respectfully solicited. To the extent necessary, a petition for an extension of time under 37 C.F.R. 1.136 is hereby made. Please charge any shortage in fees due in connection with the filing of this paper, including extension of time fees, to Deposit Account 500417 and please credit any excess fees to such deposit account.

Respectfully submitted,

McDERMOTT WILL & EMERY LLP



Gene Z. Robinson
Registration No. 33,351

600 13th Street, N.W.
Washington, DC 20005-3096
Phone: 202.756.8000 GZR:lnm
Facsimile: 202.756.8087
Date: August 15, 2005

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